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EXAMINER	
SERRAO, RANODHI N	

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/735,590	JONES ET AL.	
	Examiner	Art Unit	
	Ranodhi Serrao	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-87* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-87* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 February 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see remarks, filed 22 February 2006, with respect to the rejection(s) of claim(s) 1-87 under 35 U.S.C. Title have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art reference(s). The applicant argued in substance the limitations of the independent claims. These arguments are moot since new references have been applied to these claims. See rejections below.

Claim Objections

2. Claim 21 is objected to because of the following informalities: there are multiple preambles in the claim: "A network communication system comprising:" and "...a source device comprising." A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States or
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hoyer et al. (6,263,361). Hoyer et al. teaches a source device, comprising: a plurality of connection interfaces; and a cluster manager configured to determine performance similarities for a plurality of connections (col. 7, lines 21-37) and configured to group the plurality of connections into performance clusters based on the determined performance similarities (col. 5, lines 33-35 and col. 16, line 57-col. 17, line 19).

5. Claims 21, 57, and 67 are rejected under 35 U.S.C. 102(e) as being anticipated by Basani et al. (6,748,447).

6. As per claim 21, Basani et al. teaches a network communication system, comprising: a plurality of destination devices, each of the plurality of destination devices comprising a destination synchronization mechanism and a destination data buffer (col. 9, line 57-col. 10, line 7 and col. 13, lines 23-41); and a source device comprising: a plurality of connection interfaces configured to support a plurality of connections with the

plurality of destination devices (col. 23, line 59-col. 24, line 15), and a cluster manager configured to determine performance similarities for the plurality of connections made via the plurality of connection interfaces (col. 16, lines 8-29) and to group the plurality of connections into performance clusters based on the determined performance similarities (col. 22, lines 30-37).

7. As per claim 57, Basani et al. teaches a source device, comprising: a plurality of connection interfaces (col. 20, lines 14-28); and a cluster manager configured to: determine at least one of client service and resource priorities (col. 21, line 59-col. 22, line 30), determine the performance similarities for a plurality of connections made via the plurality of connection interfaces (col. 16, lines 8-29), and group the plurality of connections into performance clusters based on the determined performance similarities and the determined service and resource priorities (col. 22, lines 30-37).

8. As per claim 67, Basani et al. teaches a network communication system comprising: an intermediate source device, wherein the intermediate source device comprises: a cluster manager configured to: determine subsets of connections from a set of connections, wherein each connection in each subset has similar performance capabilities with the other connections in the same subset (col. 15, line 58-col. 16, line 7), and group each of the subsets in a distinct performance cluster (col. 16, lines 8-29).

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 2-6, 10-11, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. as applied to claim 1 above, and further in view of Gillett, Jr. et al. (6,295,585) (referred to hereinafter as Gillett).

11. As per claim 2, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, further comprising a plurality of synchronization mechanisms coupled with a plurality of connection interfaces, wherein the cluster manager is configured to assign a synchronization mechanism to each of the performance clusters. However, Gillett teaches a source device, further comprising a plurality of synchronization mechanisms coupled with a plurality of connection interfaces, wherein the cluster manager is configured to assign a synchronization mechanism to each of the performance clusters (see Gillett, col. 10, lines 14-29). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, further comprising a plurality of synchronization mechanisms coupled with a plurality of connection interfaces, wherein the cluster manager is configured to assign a synchronization mechanism to each of the performance clusters in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

12. As per claim 3, Hoyer et al. and Gillett teach the mentioned limitations of claims 1 and 2 above but Hoyer et al. fails to teach a source device, wherein each of the plurality of synchronization mechanisms is configured to provide computations and protocols needed to communicate data over the plurality of connections. However, Gillett teaches

a source device, wherein each of the plurality of synchronization mechanisms is configured to provide computations and protocols needed to communicate data over the plurality of connections (see Gillett, col. 15, lines 18-39). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein each of the plurality of synchronization mechanisms is configured to provide computations and protocols needed to communicate data over the plurality of connections in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

13. As per claim 4, Hoyer et al. and Gillett teach the mentioned limitations of claims 1, 2, and 3 above but Hoyer et al. fails to teach a source device, further comprising a source data buffer coupled to the plurality of synchronization mechanisms and configured to store information, and wherein the source device is configured to share the data stored in the source data buffer with a plurality of destination devices interfaced with the source device via plurality of connection interfaces. However, Gillett teaches a source device, further comprising a source data buffer coupled to the plurality of synchronization mechanisms and configured to store information, and wherein the source device is configured to share the data stored in the source data buffer with a plurality of destination devices interfaced with the source device via plurality of connection interfaces (see Gillett, col. 12, line 59-col. 13, line 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, further comprising a source data buffer coupled to the

plurality of synchronization mechanisms and configured to store information, and wherein the source device is configured to share the data stored in the source data buffer with a plurality of destination devices interfaced with the source device via plurality of connection interfaces in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

14. As per claim 5, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance clusters include a high performance cluster. However, Gillett teaches a source device, wherein the performance clusters include a high performance cluster (see Gillett, col. 11, lines 61-65). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance clusters include a high performance cluster in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

15. As per claim 6, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance clusters include an intermediate performance cluster. However, Gillett teaches a source device, wherein the performance clusters include an intermediate performance cluster (see Gillett, col. 14, lines 56-67). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance clusters include an intermediate performance cluster in order to provide an interconnect

for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

16. As per claim 10, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance similarity is determined based on the connection security of each of the plurality of connections. However, Gillett teaches a source device, wherein the performance similarity is determined based on the connection security of each of the plurality of connections (see Gillett, col. 15, lines 18-39). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance similarity is determined based on the connection security of each of the plurality of connections in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

17. As per claim 11, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance similarity is determined based on the error rate of each of the plurality of connections. However, Gillett teaches a source device, wherein the performance similarity is determined based on the error rate of each of the plurality of connections (see Gillett, col. 6, lines 33-45). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance similarity is determined based on the error rate of each of the plurality of connections in order to provide an

interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

18. As per claim 14, Hoyer et al. and Gillett teach the mentioned limitations of claims 1, 2, 3, and 4 above but Hoyer et al. fails to teach a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when data in the source data buffer has changed. However, Gillett teaches a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when data in the source data buffer has changed (see Gillett, col. 12, line 59-col. 13, line 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when data in the source data buffer has changed in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

19. As per claim 15, Hoyer et al. and Gillett teach the mentioned limitations of claims 1, 2, 3, and 4 but Hoyer et al. fails to teach a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the

destination devices only when one of the destination devices requests an update. However, Gillett teaches a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when one of the destination devices requests an update (see Gillett, col. 13, line 66-col. 14, line 14). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when one of the destination devices requests an update in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

20. As per claim 16, Hoyer et al. and Gillett teach the mentioned limitations of claims 1, 2, 3, and 4 above but Hoyer et al. fails to teach a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices, and wherein each of the plurality of synchronization devices is further configured to update the destination devices interfaced with the synchronization device only when all such destination devices have requested an update. However, Gillett teaches a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices, and wherein each of the

plurality of synchronization devices is further configured to update the destination devices interfaced with the synchronization device only when all such destination devices have requested an update (see Gillett, col. 12, line 59-col. 13, line 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices, and wherein each of the plurality of synchronization devices is further configured to update the destination devices interfaced with the synchronization device only when all such destination devices have requested an update in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

21. Claims 7-9, 12, 13, and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. as applied to claim 1 above, and further in view of Wipfel et al. (6,151,688) (referred to hereinafter as Wipfel).

22. As per claim 7, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a network communication system, wherein some of the plurality of destination devices use low bandwidth connections with the source device, and wherein some of the performance clusters are low performance clusters configured to service the low performance connections. However, Wipfel teaches a network communication system, wherein some of the plurality of destination devices use low bandwidth

connections with the source device, and wherein some of the performance clusters are low performance clusters configured to service the low performance connections (see Wipfel, col. 7, lines 19-29). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a network communication system, wherein some of the plurality of destination devices use low bandwidth connections with the source device, and wherein some of the performance clusters are low performance clusters configured to service the low performance connections in order to provide a major advantage of clusters which is their support for heterogeneous nodes (see Wipfel, col. 1, lines 47-54).

23. As per claim 8, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance similarity for the plurality of connections is determined based on the bandwidth capability of each of the plurality of connections. However, Wipfel teaches a source device, wherein the performance similarity for the plurality of connections is determined based on the bandwidth capability of each of the plurality of connections (see Wipfel, col. 5, lines 36-56). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance similarity for the plurality of connections is determined based on the bandwidth capability of each of the plurality of connections in order to provides rapid communication between nodes (see Wipfel, col. 1, line 62-col. 2, line 3).

24. As per claim 9, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance similarity for the plurality of

connections is determined based on the latency of each of the plurality of connections. However, Wipfel teaches a source device, wherein the performance similarity for the plurality of connections is determined based on the latency of each of the plurality of connections (see Wipfel, col. 5, lines 36-56). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance similarity for the plurality of connections is determined based on the latency of each of the plurality of connections in order to provides rapid communication between nodes (see Wipfel, col. 1, line 62-col. 2, line 3).

25. As per claim 12, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the cluster manager is further configured to detect a change in performance capabilities for one of the plurality of connections and to assign the connection to another performance cluster based on the change in performance capabilities. However, Wipfel teaches a source device, wherein the cluster manager is further configured to detect a change in performance capabilities for one of the plurality of connections and to assign the connection to another performance cluster based on the change in performance capabilities (see Wipfel, col. 8, lines 32-51). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the cluster manager is further configured to detect a change in performance capabilities for one of the plurality of connections and to assign the connection to another performance cluster based on the change in performance capabilities in order to provide a way to coordinate shared

resource access when an interconnect fails without relying on a local area network or a serial link (see Wipfel, col. 3, line 64-col. 4, line 6).

26. As per claim 13, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the cluster manager is further configured to detect a new connection, determine the performance capabilities of the new connection, and add the new connection to a performance cluster based on the performance capabilities of the new connection. However, Wipfel teaches a source device, wherein the cluster manager is further configured to detect a new connection, determine the performance capabilities of the new connection, and add the new connection to a performance cluster based on the performance capabilities of the new connection (see Wipfel, col. 2, lines 12-21). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the cluster manager is further configured to detect a new connection, determine the performance capabilities of the new connection, and add the new connection to a performance cluster based on the performance capabilities of the new connection in order to implement cost-effective solutions by using less reliable nodes and swap nodes out when they fail (see Wipfel, col. 2, lines 12-21).

27. Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Basani et al. as applied to claims 67, 68, and 83 above, and further in view of Wipfel. Basani teaches the mentioned limitations of claims 67, 68, and 83 above but fails to teach a network communication system further comprising: a remote source device comprising:

a remote synchronization mechanism that is coupled to the intermediate synchronization mechanism via a remote connection and a remote source data buffer. However, Wipfel teaches a network communication system further comprising: a remote source device comprising: a remote synchronization mechanism that is coupled to the intermediate synchronization mechanism via a remote connection (see Wipfel, col. 4, lines 26-46) and a remote source data buffer (see Wipfel, col. 12, lines 21-32). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Basani et al. to a network communication system further comprising: a remote source device comprising: a remote synchronization mechanism that is coupled to the intermediate synchronization mechanism via a remote connection and a remote source data buffer in order to reallocate sharable resources without interrupting work on all nodes (see Wipfel, col. 3, line 64-col. 4, line 6).

28. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. as applied to claim 1 above, and further in view of Kremien (20010034752).

29. As per claim 17, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein determining the performance similarities for the plurality of connections comprises: assigning all of the plurality of connections to a primary performance cluster; and gathering the average latency for each of the plurality of connections. However, Kremien teaches a source device, wherein determining the performance similarities for the plurality of connections comprises: assigning all of the

plurality of connections to a primary performance cluster; and gathering the average latency for each of the plurality of connections (see Kremien, paragraph 0064). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein determining the performance similarities for the plurality of connections comprises: assigning all of the plurality of connections to a primary performance cluster; and gathering the average latency for each of the plurality of connections in order to enable centralized load balancing solution's their decision making by maintaining state information regarding all cluster members in one location. (see Kremien, paragraph 0009).

30. As per claim 18, Hoyer et al. and Kremien teach the mentioned limitations of claims 1, and 17 above but Hoyer et al. fails to teach a source device, wherein the cluster manager is further configured to group the plurality of connections into performance clusters based on the average latency of each of the plurality of connections. However, Kremien teaches a source device, wherein the cluster manager is further configured to group the plurality of connections into performance clusters based on the average latency of each of the plurality of connections (see Kremien, paragraph 0030). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the cluster manager is further configured to group the plurality of connections into performance clusters based on the average latency of each of the plurality of connections in order to provide a distributed load balancing system and method for resource management in a computer network (see Kremien, paragraph 0024).

31. Claim 19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. and Kremien (20010034752) as applied to claims 1 and 17 above, and further in view of (Quarterman et al. (2002/0177910). Hoyer et al. and Kremien teach the mentioned limitations of claims 1 and 17 above but fail to teach a source device, wherein grouping the plurality of connections into performance clusters further comprises: determining a mean latency for the primary performance cluster based on the average latencies for each of the plurality of connections; determining a standard deviation of the average latencies for each of the plurality of connections relative to the mean latency for the primary performance cluster; and determining the number of performance clusters required based on the mean latency for the primary performance cluster and standard deviation of the average latencies for each of the plurality of connections. However, Quarterman et al. teaches a source device, wherein grouping the plurality of connections into performance clusters further comprises: determining a mean latency for the primary performance cluster based on the average latencies for each of the plurality of connections (see Quarterman et al., paragraph 0158); determining a standard deviation of the average latencies for each of the plurality of connections relative to the mean latency for the primary performance cluster (see Quarterman et al., paragraph 0150); and determining the number of performance clusters required based on the mean latency for the primary performance cluster (see Quarterman et al., paragraph 0158) and standard deviation of the average latencies for each of the plurality of connections(see Quarterman et al., paragraph 0150). It would

have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. and Kremien to a source device, wherein grouping the plurality of connections into performance clusters further comprises: determining a mean latency for the primary performance cluster based on the average latencies for each of the plurality of connections; determining a standard deviation of the average latencies for each of the plurality of connections relative to the mean latency for the primary performance cluster; and determining the number of performance clusters required based on the mean latency for the primary performance cluster and standard deviation of the average latencies for each of the plurality of connections in order to accurately characterize the performance of such a large network, (see Quarterman et al., paragraph 0006).

32. Claim 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. as applied to claim 1 above, and further in view of Hendricks et al. (6,463,585). Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein grouping the plurality of connections into performance clusters further comprises grouping the connections using a sum-of-squares determination. However, Hendricks et al. teaches a source device, wherein grouping the plurality of connections into performance clusters further comprises grouping the connections using a sum-of-squares determination (see Hendricks et al., col. 70, line 57-col. 71, line 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein grouping the plurality of

connections into performance clusters further comprises grouping the connections using a sum-of-squares determination in order to analyze the program watched information and marketing data 720, 722, and provide the analyzed information to the processing and editing subroutines (see Hendricks et al., col. 11, lines 26-50).

33. Claims 61 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basani et al. as applied to claim 57 above, and further in view of VanHuben et al. (6,038,651).

34. As per claim 61, Basani et al. teaches the mentioned limitations of claim 57 above but fails to teach a source device, wherein the cluster manager is configured to create fewer performance clusters when it is determined that resource priorities are more important. However, VanHuben et al. teaches a source device, wherein the cluster manager is configured to create fewer performance clusters when it is determined that resource priorities are more important (see VanHuben et al., col. 1, line 48-col. 2, line 4). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Basani et al. to a source device, wherein the cluster manager is configured to create fewer performance clusters when it is determined that resource priorities are more important in order to manage the interface between two clusters in a bi-nodal SMP system (see VanHuben et al., col. 3, lines 57-67).

35. As per claim 62, Basani et al. teaches the mentioned limitations of claim 57 above but fails to teach a source device, wherein the cluster manager is configured to create more performance clusters, when it is determined that client service is more of a

priority. However, VanHuben et al. teaches a source device, wherein the cluster manager is configured to create more performance clusters, when it is determined that client service is more of a priority (see VanHuben et al., col. 1, line 48-col. 2, line 4). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Basani et al. to a source device, wherein the cluster manager is configured to create more performance clusters, when it is determined that client service is more of a priority in order to manage the interface between two clusters in a bi-nodal SMP system (see VanHuben et al., col. 3, lines 57-67).

36. Claims 22-56, 58-60, 63-65, 68-83, and 85-87, have similar limitations as to claims 1-21, 57, 61, 62, 66, 67, 84, and 88, therefore, they are being rejected under the same rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571)272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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